


Application No.: 09/485,750

Applicant seeks leave to provide drawings amended as proposed by the Examiner after a Notice of Allowance has been issued.

It is urged that the instant application is now in condition for allowance which is courteously solicited.

Respectfully submitted,



Karl Hormann
Registration No.: 26,470

Area Code (617)-491-8867

[Patent Claims] What is claimed is:

1. (Amended) [Structure] A structure of optically effective diffraction security elements with a metallic reflection layer, **[characterized by]** comprising a
5 target-oriented electric code of data by additionally applied [[page 8, lines 7-10]] beam, grid, bow and/or circularly shaped electrically conductive structures with steep edges towards adjacent non-metallized structures in different planes [[DE 197 34 855]], the line thickness of the smallest electrically conductive structure which may be examined being less than or
10 equal to 5 mm and non-zero.
2. (Amended) [Structure] The structure of security elements of claim 1, [allow] allowing examination of security elements, **[characterized by]** further comprising a target-oriented electric code of data by additionally applied
15 [[page 8, line 7-10]] beam, grid, bow and/or circularly shaped metallized structures with steep edges towards adjacent non-metallized structures in different planes [[DE 197 34 855]], the line width of the smallest metallized structure which may be examined being less than or equal to 5 mm, but non-zero.
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3. (Amended) [Structure] The structure of security elements of [one or more of the preceding claims, characterized by the fact that] claim 1, wherein different electrically conductive structures [[claim 1]] possess different electric conductivities.
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4. (Amended) [Structure] The structure of security elements of [one or more of the preceding claims, characterized by the fact that] claim 1, wherein at least two structures within a security element possess different application thicknesses [[claim 1]].
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5. (Amended) [Structure] The structure of security elements of [one or more of the preceding claims, characterized by the fact that the] claim 1, wherein

a width of an electrically conductive layer of constant electric conductivity corresponds to [the] a width of at least two electrodes of an examination apparatus.

- 5 6. (Amended) [Structure] The structure of security elements of [one or more of the preceding claims, **characterized by the fact that the] wherein a** distance between two electrically conductive structures of [the] a same and/or different electric conductivity is at least .1 mm.
- 10 7. (Amended) [Structure] The structure of security elements of [one or more of the preceding claims, **characterized by the fact that] wherein** the additionally applied electrically conductive structures are inks or dyes [[page 6, lines 14-22]].
- 15 8. (Amended) [Apparatus] An apparatus for [the] capacitive examination of documents with optically effective diffraction security elements with a metallic reflection layer, [**characterized by the fact that] wherein** a capacitively operating scanner [(4, 33-35)] the width of which is larger than the largest width of a document [[DE 197 34 855]] examines electrically conductive
- 20 structures
- [(claim] 1] arranged within metallized security elements [(37)] by means of a plurality of transmitting electrodes [(5)] arranged in one or more rows in side by side relationship and with a receiving electrode [(6)] extending along the transmitting electrodes [(5)] on [the] a same side as the document to be
- 25 examined [[see description of Fig. 1 as well as Fig. 1-10, 13-15]] and evaluates [them] the structures by electronic energizing and evaluation circuits arranged in the scanner [(4, 33-35)] for comparing [the] a signal pattern of the document to be examined with corresponding reference signal patterns.
- 30 9. (Amended) [Apparatus] The apparatus of claim 8, [**characterized by the**

fact that] wherein at least two adjacent electrodes are arranged electrically connected.

10. (Amended) [Apparatus] The apparatus of claim [8 or] 9, **[characterized by the fact that] wherein the** electronic energizing circuit consists of a current source, a multiplexer [(10)], an oscillator [(11)] for providing energy for the transmitting electrodes [(5)] and an oscillator [(12)] for energizing the multiplexer [(10)].

10 11. (Amended) [Apparatus] The apparatus of [one or more of claims] claim 8 [to 10, **characterized by the fact that] wherein** the electronic evaluation circuit consists of a current source, an amplifier [(13)], a demodulator [(14)], a comparator [(15)], a micro-processor [(16)] with memory as well as filters for the suppression of extraneous and interference signals.

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12. (Amended) [Apparatus] The apparatus of [one or more of claims] claim 8 [to 11, **characterized by the fact that] wherein** the smallest distance between two transmitting electrodes [(5)] is smaller than .5 mm and non-zero.

20 13. (Amended) [Apparatus] The apparatus of [one or more of claims] claim 8 [to 12, **characterized by the fact that the] wherein a** distance between a transmitting electrode [(5)] and the receiving electrode [(6)] is at least .5 mm.

25 14. (Amended) [Apparatus] The apparatus of [one or more of the preceding claims] claim 8 [to 13, **characterized by the fact that] wherein** the apparatus is provided with a biasing device which guides the document to be examined parallel to the transmitting and receiving electrodes, [preferably biases] biased against the scanner.

30 15. (Amended) [Apparatus] The apparatus of [one or more of the preceding claims] claim 8 [to 14, **characterized by the fact that the] wherein** shafts of

the document transport rollers are connected to a mass by sliding contacts.

16. (Amended) [Apparatus] The apparatus of [one or more of claims] claim 8
[to 14, characterized by the fact that] wherein the apparatus is arranged in
5 high speed document processing machines.

17. (Amended) [Apparatus] The apparatus of [one or more of claims] claim 8
[to 16, characterized by the fact that] wherein the apparatus is arranged in
manual apparatus.

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ABSTRACT OF THE DISCLOSURE.

Security elements for documents with a target-oriented electric code
formed by electrically conductive structures arranged relative to each other or
5 within each other and separated by non-conductive structures and further
provided with electrically conductive examination indicia arranged in a target-
oriented manner to yield predetermined signal pattern when examined by an
examination apparatus for comparison with stored patterns.

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